



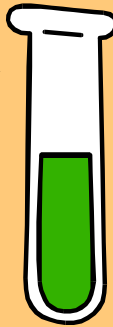
8-Hour Ozone

Designations and State Implementation Plan Development

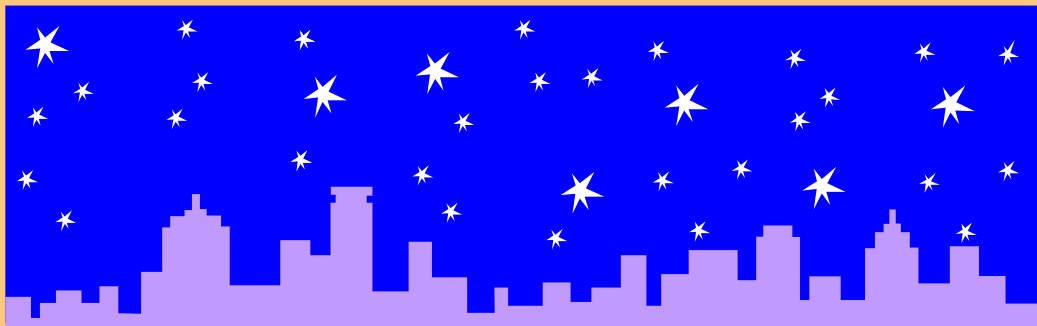
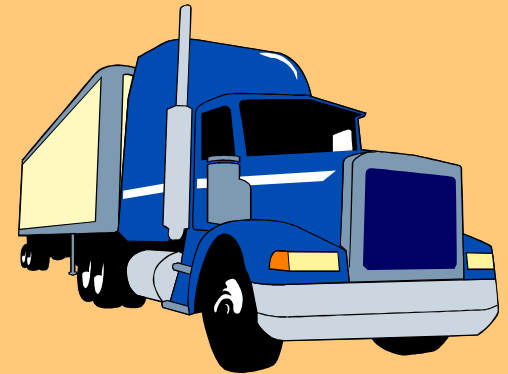
Crafting a new SIP to reach Attainment 2004-2009

**Clean Air Act and Inter-Agency Air Quality Task
Force Presentations
April 22 and 29, 2004**

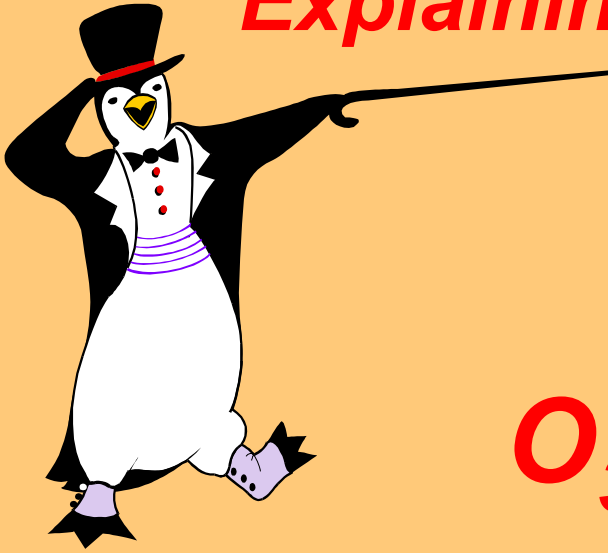
*...Our day-to-day activity leads
to higher Ozone levels*



NOX + VOC



Explaining the ozone problem....

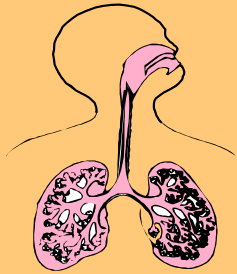


Low Level Ozone



*....combined in sunlight and
humidity to produce
photochemical smog*

“Why”



Ozone-Related Health Effects of Concern

- ▶ **Difficulty in breathing, shortness of breath**
- ▶ **Aggravated/prolonged coughing and chest pain**
- ▶ **Increased aggravation of asthma, susceptibility to respiratory infection resulting in increased hospital admissions and emergency room visits**
- ▶ **Repeated exposures could result in chronic inflammation and irreversible structural changes in the lungs, that can lead to premature aging of the lungs and illness such as bronchitis and emphysema**
- ▶ **Growing evidence suggests association with premature death**

“Why”

Changing to the 8-Hr Ozone NAAQS

- New standard looks at concentration averaged over an 8 hour period
- New standard dampens year-to-year variation based on meteorology
- Health professionals feel the 8-hr standard is a better health definition than the 1-hr standard - deals w/ chronic exposure impacts...more typical of most areas...more important to long term health.

“Why”

**New Plans will respond to the
continuing public health concern...**

***3.5 to 4 Million Wisconsin residents live in areas
with elevated ozone concentrations during the
summer. At least 300,000 are “at risk” for its
respiratory health impact.***

***The required Ozone SIP development should
bring about half this population living in areas
with the worst AQ back to attainment levels.***

“Why”

Key Pieces - AQ “Attainment” Planning under the Clean Air Act

- ✓ Designate” areas for Ozone & PM-2.5 - either “attainment” or “nonattainment”
- Evaluate where to reduce pollution
- Evaluate how much pollutant reduction is needed to reach regional attainment
- Develop and adopt formal Plans (SIPs) which include emission control programs/rules, milestones & deadlines
- Attain the standards and redesignate areas to reflect the better air quality

“What”

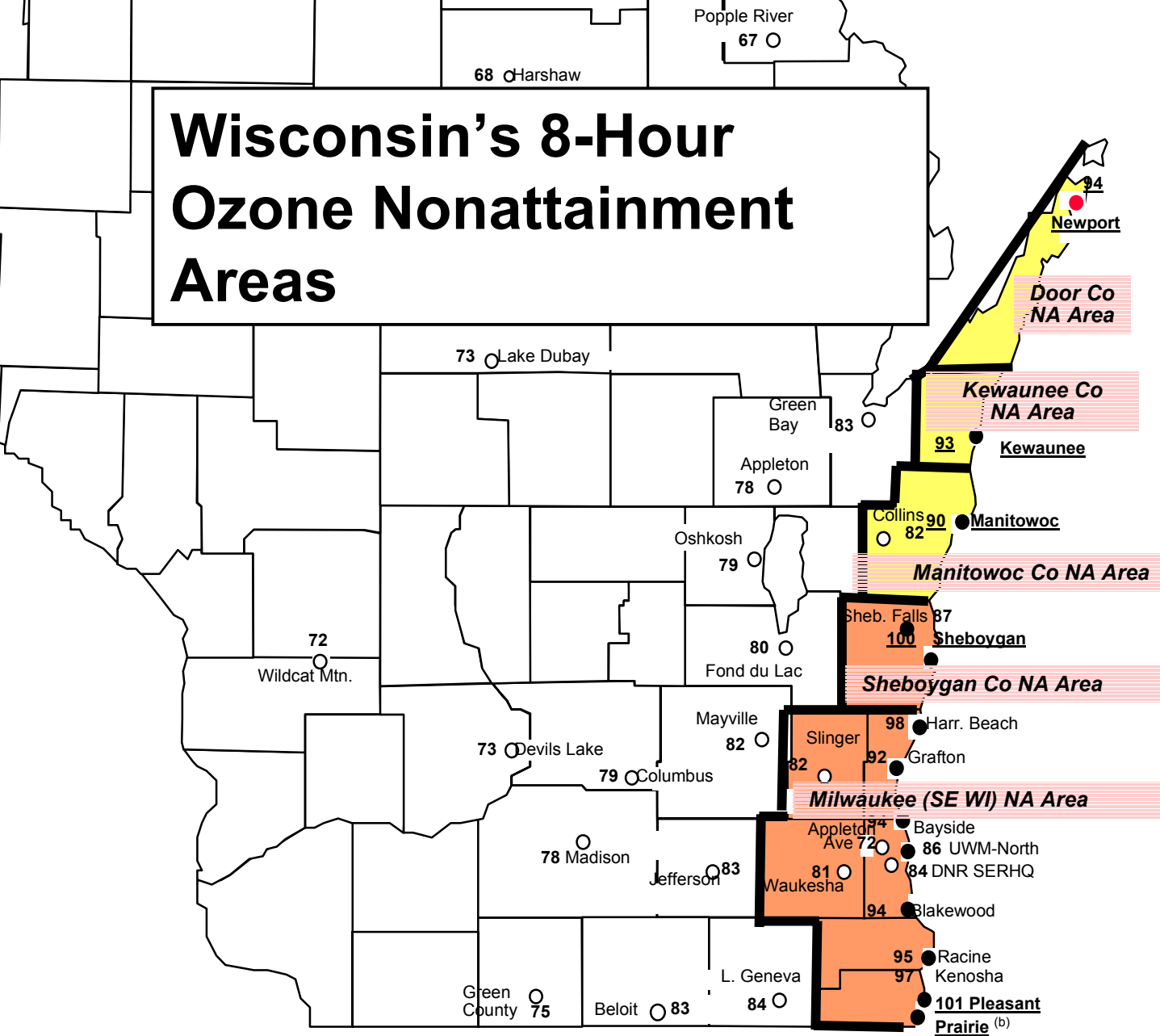
New 8-Hour Ozone Designations & Nonattainment Classifications

- **Basic - Door, Kewaunee & Manitowoc Co's**
- Marginal - none
- **Moderate - Sheboygan Co & SE WI 6 Co's**
- Serious - none
- Severe - none
- Extreme - none

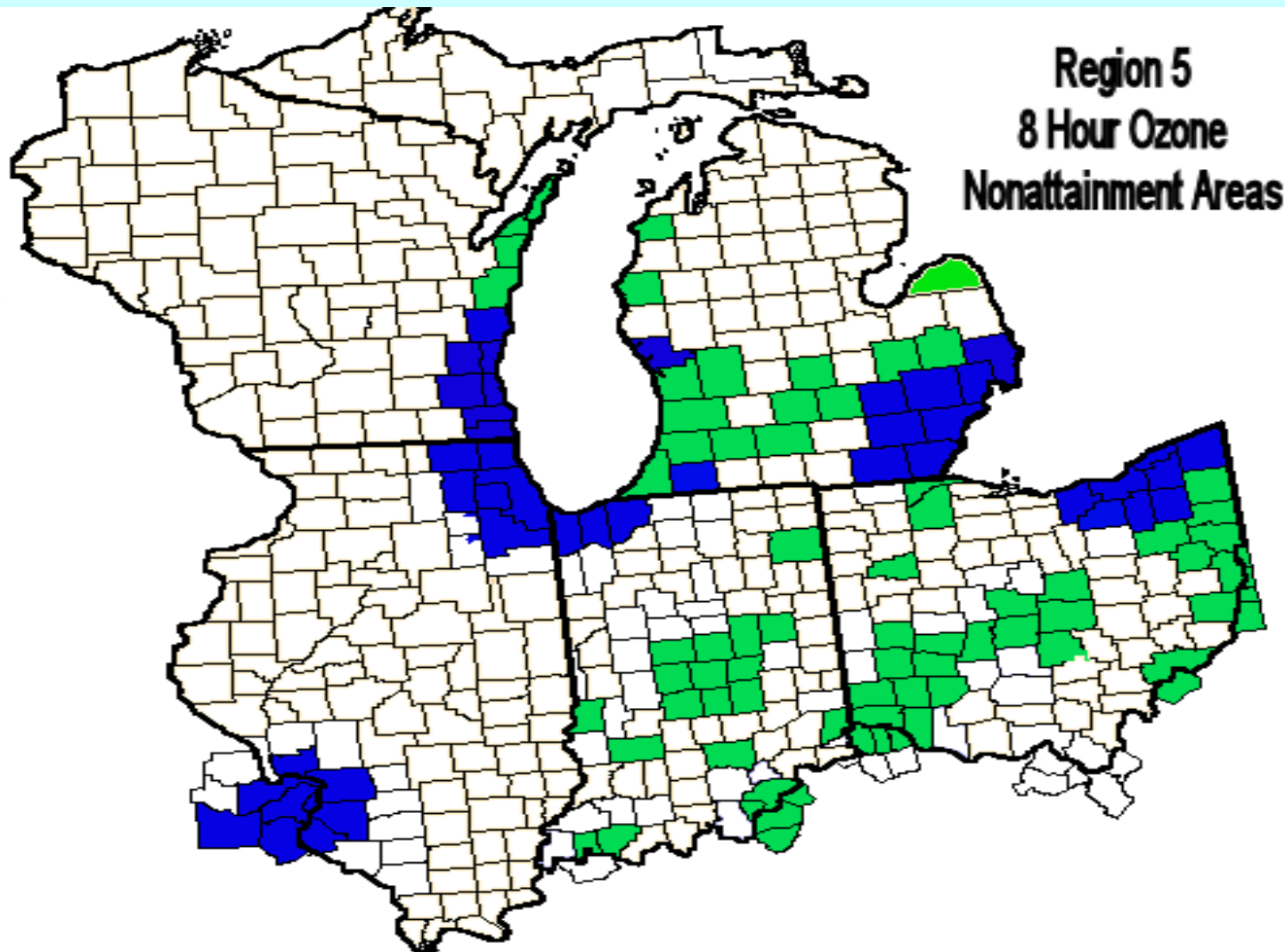
Rest of State = Attainment

“Where”

Wisconsin's 8-Hour Ozone Nonattainment Areas



Average Annual 4th Highest Peak Daily Running 8-Hr Ozone Values
(i.e., 8-Hr O₃ "Design Values"^a)
Wis DNR Ozone Monitoring Sites 2001 - 2003



Moderate nonattainment areas.



Subpart 1 or “Basic” nonattainment areas.



Basic WI Ozone SIP Schedule....

- Final Area Designations : April 15
- Technical Evaluations : 2004-2006
- Regional Baseline Modeling - 2004
- Attainment Plan Modeling : 2005
- Major SIP Submittals : 2006 & 2007
- Initial Attainment Date(s) : 2009 & 2010
- Latest Attainment Date(s) : 2013-2015

“When”

....how the Air Program is approaching....

- » Adopting the new ambient standard
- » Informing the Public regarding their AQ status
- » Perform ongoing Monitoring, Inventory & Modeling Efforts
- » Starting a SIP Development Process for 8-hr Ozone -
 - » Regional Modeling for Ozone and PM
 - » Control Options Development
 - » Control Plan Dialogue w/ Stakeholders

“How”

Starting Planning Perspective

- Address problem as regional issue for “AQ connected” nonattainment areas
- A successful SIP will most likely rely on a larger, demonstrated contributing area, for emissions reductions
- Ground on AQ “impact” and “benefit” to violating sites
- Find an appropriate geographic and sector balance of emission control responsibility
- Work from existing authority under WI and federal law - may include regional Governors’ agreement(s)

“Who and Where”

Four Planning & Control Levels

- National Sector-based Programs
- Large Region (25-30 State) - Statewide Plans to meet Budgets
- LADCO States Regional Agreements for Regional Attainment
- State Plans (SIPs) for Local Areas

Bottom Line - National Programs and EPA-proposed large region controls won't bring our areas to attainment!

“How”

WI Ozone Planning Input & Outreach

- **Clean Air Act Task Force**
- **Inter-Agency Briefings**
- **Planning, Transportation & Environmental Health Stakeholders**
- **Energy and Industry Stakeholders**
- **Public Outreach Meetings**
- **Clean Air Partners**
- **Regional Partners**

“Who”

Some Evaluation Criteria for Current & Future Emissions & Ozone/PMAQ Impact Assessment

- AQ and Meteorology during Ozone Episodes
- Emissions Density
- Expected Emissions Impacts
- Area Development and Activity Patterns
- Economic Linkages between potential areas
- Travel and Commuting Patterns
- Relative Unit Emissions Baselines
- Relative Emissions Control Cost & Efficiency

“Where”

Anti-Backsliding & Transition from 1-Hr to 8-Hr Ozone Requirements *(Maybe!)*

Mandatory Programs	Residual 1-Hr Area	8-Hr Basic	8-Hr Moderate
<i>Effective Dates</i>	<i>Until 6/15/05</i>	<i>After 6/15/05</i>	<i>After 6/15/05</i>
Transportation Conformity	X	X	X
VOC RACT	X	RACM***	Update**
NOx RACT	<i>Waived</i>	RACM***	X
VOC & NOx RACM	Partial	X	X
New Source Review Major Source Thresholds	25 Ton	100 Ton	100 Ton*
Off-set Ratios	1.3:1	1:1	1.15:1*
Modeled Attainment Demo	X	X	X
Initial and Attainment Budgets	X	X	X
Stage 2 Vapor Recovery	X	RACM***	X**
RFG	X		X**
I/M Program	Enhanced	RACM***	Basic**
<i>* Change to Draft ** Subject to Anti-Backsliding ***Aug 04 EPA Rule</i>			

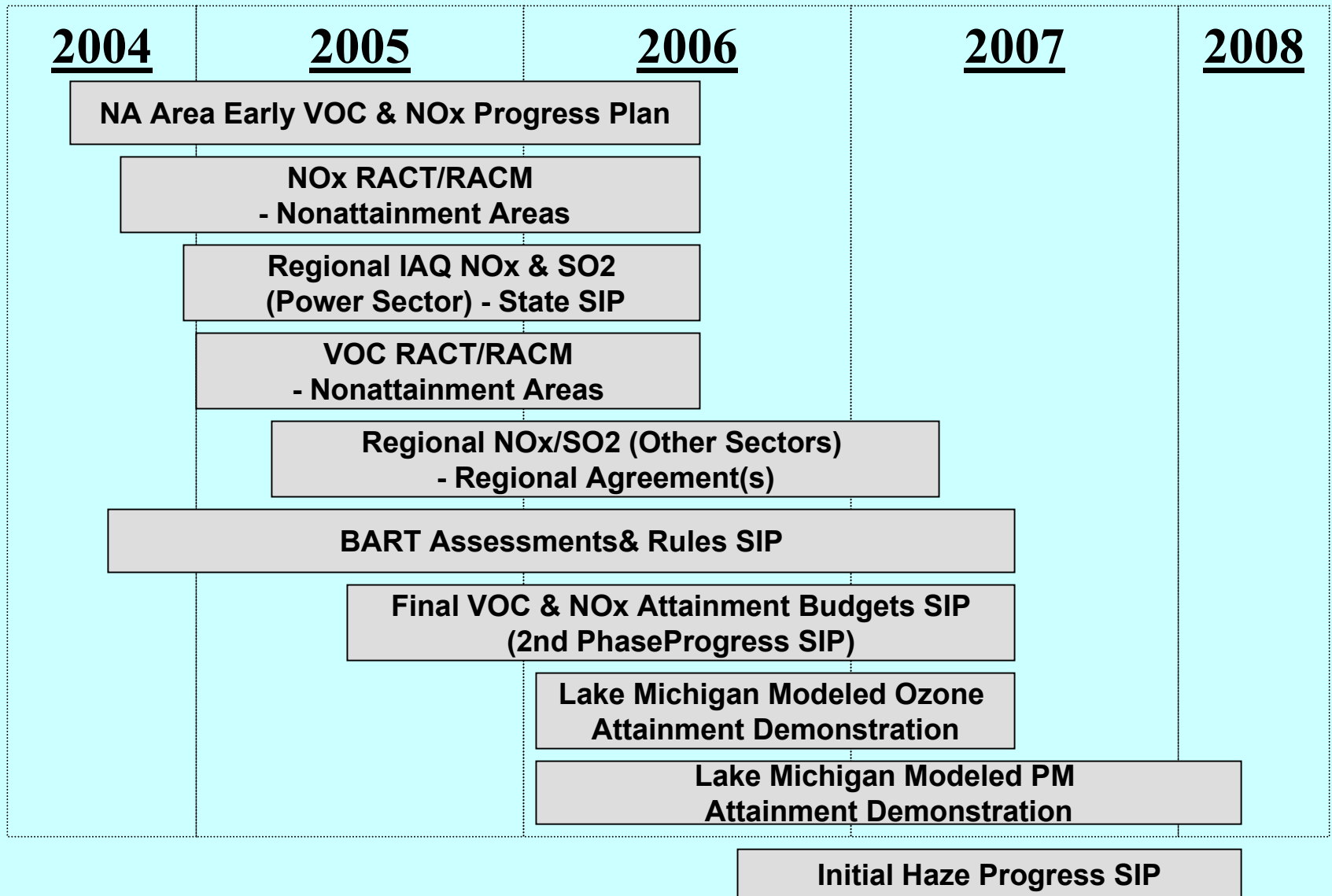
"What"

Major Plan/Program Requirements

Mandatory & Budget-Based Programs	Basic Areas	Moderate Areas
Formal Attainment Date	2009	2010
Initial Budget & Attainment Budgets Milestones (VOC and NOx)	2006/08	2006/09
Initial Progress (15% VOC or Initial Annual Progress Increments) SIPs	2006	2006
VOC RACT SIP Updates*	(2006-7)	2006
New NOx RACT SIP**	(2006-7)	2006
Clean Air Interstate (IAQR) SIP***	2006	2006
VOC & NOx RACM SIP	2007	2007
Ozone Attainment Demonstration & Attainment Budgets SIP	2007	2007
Regional PM Commitments and Regional Haze Progress SIPs	2008	2008

“What”

Initial SIP Products Development Schedule



What's in it for us all?

- ❖ Fair allocation of controls and cost
- ❖ Effective control programs and investment
- ❖ Timely attainment of ambient air standard
- ❖ Improvement in local/state public health
- ❖ Certainty for facility & infrastructure plans